

LEGEND

SODA LAKE STATE WILDLIFE
MANAGEMENT AREA



BLACK BAYOU GAME AND
FISH PRESERVE



EXHIBIT F WILDLIFE MANAGEMENT AREA GAME & FISH PRESERVE

NORTH-SOUTH EXPRESSWAY
I-220 TO ARKANSAS STATE LINE
STATE PROJECT NO. 700-24-0072
FEDERAL AID PROJECT NO. DE-NHS-0009 (801)
CADDO PARISH



DEMOPULOS AND FERGUSON, INC.
CONSULTING ENGINEERS

Prime Farmland

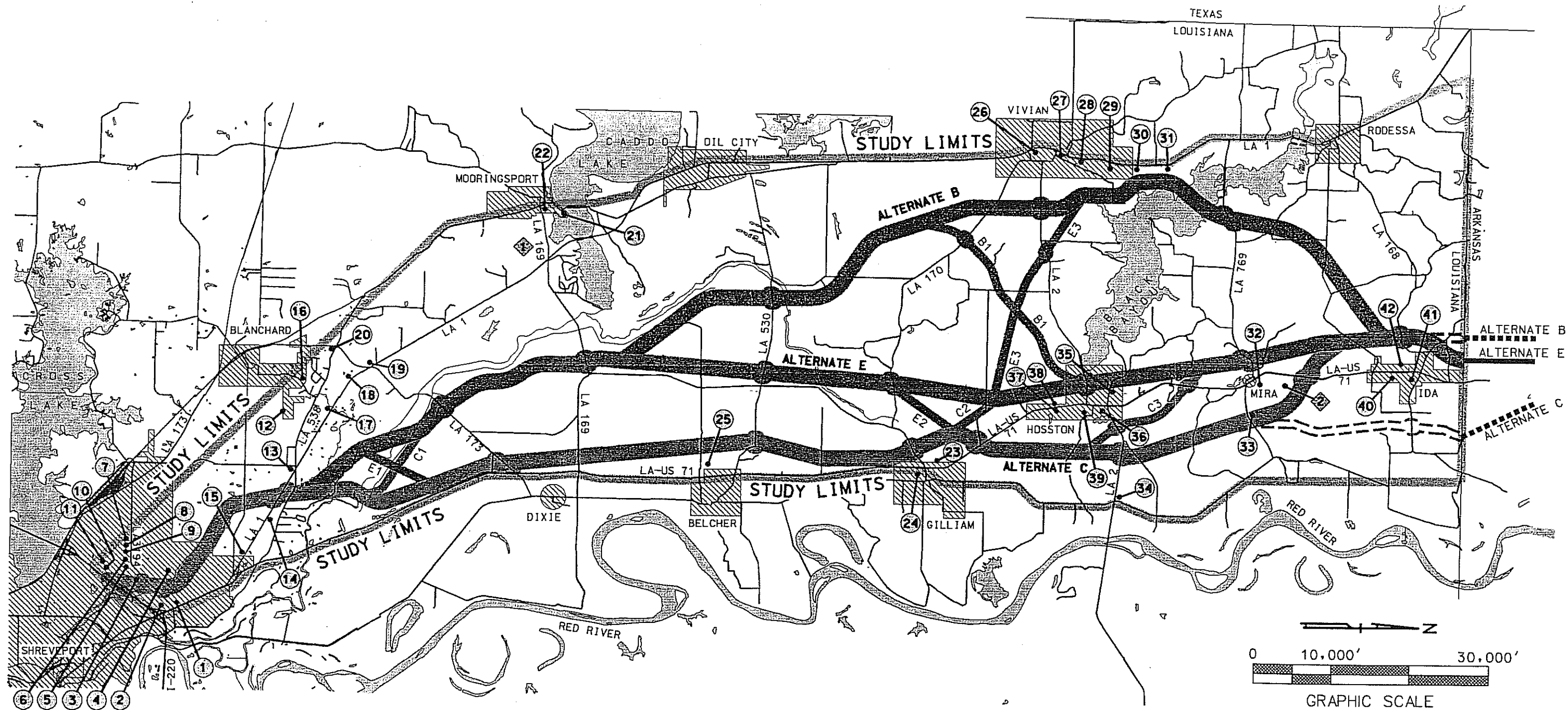
The U.S. Department of Agriculture defines prime farmland soils as those soils best suited to producing food, feed, forage, fiber, and oilseed crops. A large majority of the study limits contain soils which are classified as either prime farmland or farmland of statewide importance soils. The majority of prime farmland within the study area is associated with the Red River floodplain. Areas of prime farmland are shown on Exhibit D: Land Use.

Listed Species of Concern and Critical Habitat

The U.S. Fish and Wildlife Service (USFWS) and the Louisiana Department of Wildlife and Fisheries, Louisiana Natural Heritage Program (LNHP) were contacted regarding the possible occurrence of threatened and endangered species within the study corridor. By law, special consideration must be given to federally listed species and their associated habitat. The occurrence of these species along the study corridor was investigated to determine if special precautions were warranted in project planning.

Federally listed faunal species which could occur within the study area include the Florida panther, Louisiana black bear, red-cockaded woodpecker, bald eagle, eskimo curlew, Bachman’s warbler, and American alligator. No recent sightings of the Florida panther have been reported in Louisiana and it is doubtful that any occur within the area. Based on current records and observations it is doubtful that the red-cockaded woodpecker will be found along the project corridor. Currently, no floral species in the project area are protected under the Endangered Species Act.

The LNHP database includes several species of state-listed plants and animals which are located in close proximity to the corridor study area. Currently, these species are only state listed and are not afforded federal protection. A complete listing of all species of concern is presented in Table 1.



INDEX TO UNDERGROUND STORAGE TANKS

- | | | |
|-------------------------------|--------------------------------------|-----------------------------|
| 1. GAS STATION | 15. GAS STATION | 29. GAS STATION |
| 2. GAS STATION | 16. GAS STATION | 30. OLD GAS STATION |
| 3. OLD GAS STATION | 17. RAILWAY SERVICES (PRIVATE PUMPS) | 31. GAS STATION |
| 4. GAS STATION | 18. POTENTIAL U.S.T.'s | 32. HOME (PRIVATE PUMP) |
| 5. GAS STATION | 19. GAS STATION | 33. HOME (PRIVATE PUMP) |
| 6. GAS STATION | 20. GAS STATION | 34. POTENTIAL U.S.T.'s |
| 7. CAR WASH (OLD GAS STATION) | 21. GAS STATION | 35. GAS STATION |
| 8. GAS STATION | 22. OLD GAS STATION | 36. OLD GAS STATION |
| 9. POTENTIAL U.S.T.'s | 23. GAS STATION | 37. BUSINESS (PRIVATE PUMP) |
| 10. GAS STATION | 24. OLD GAS STATION | 38. GAS STATION |
| 11. OLD GAS STATION | 25. GAS STATION | 39. OLD GAS STATION |
| 12. GAS STATION | 26. GAS PUMPS | 40. OLD GAS STATION |
| 13. GAS STATION | 27. GAS STATION | 41. GAS STATION |
| 14. SHERIFF OFFICE GAS PUMPS | 28. OLD GAS STATION | 42. POTENTIAL U.S.T.'s |

LEGEND

- UNDERGROUND STORAGE TANK (B)
- SOLID WASTE SITE (D)

INDEX TO SOLID WASTE SITES

1. EAST OF MOORINGSPORT
2. NORTH OF MIRA

EXHIBIT H SOLID WASTE SITES AND UNDERGROUND STORAGE TANK LOCATIONS

NORTH-SOUTH EXPRESSWAY
I-220 TO ARKANSAS STATE LINE
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TABLE 1
LISTED SPECIES POTENTIALLY OCCURRING WITHIN
THE NORTH-SOUTH EXPRESSWAY CORRIDOR STUDY AREA.

<u>Common Name</u>	<u>Scientific Name</u>	<u>Designated Status</u>
<u>Mammals</u>		
Florida panther	<u>Felix concolor coryi</u>	E
Louisiana black bear	<u>Ursus americanus luteolus</u>	T
<u>Birds</u>		
Red-cockaded woodpecker	<u>Picoides borealis</u>	E
Eskimo curlew	<u>Numenius borealis</u>	E
Bald eagle	<u>Haliaeetus leucocephalus</u>	E
Bachman's warbler	<u>Vermivora bachmanii</u>	E
<u>Reptiles</u>		
Southern prairie skink	<u>Eumecus septentrionalis</u>	S1
American alligator	<u>Alligator mississippiensis</u>	T
<u>Fish</u>		
Western sand darter	<u>Ammocrypta clara</u>	S2

TABLE 1 (cont.)
LISTED SPECIES POTENTIALLY OCCURRING WITHIN
THE NORTH-SOUTH EXPRESSWAY CORRIDOR STUDY AREA.

<u>Common Name</u>	<u>Scientific Name</u>	<u>Designated Status</u>	<u>US</u>
<u>Plants</u>			
Golden wave tick seed	<u>Coreopsis intermedia</u>	S1	
American alumroot	<u>Heuchera americana</u>		
Bur oak	<u>Quercus macrocarpa</u>	S1	
Long-leaved wild buckwheat	<u>Eriogonum longifolium</u>	S2	
Louisiana squarehead	<u>Tetragonotheca ludoviciana</u>	S2	
Pale umbrella-wort	<u>Mirabilis albida</u>	S1-S2	
Smooth twistflower	<u>Streptantus hyacinthoides</u>	S2-S3	
Heart-leaved skullcap	<u>Scutellaria cardiophylla</u>	S2-S3	
Yellow pimpernel	<u>Taenidia integerrima</u>	-S2--	
Evening rainlily	<u>Cooperia dummondii</u>	S2	
Granite gooseberry	<u>Ribes curvatum</u>	S2	
Cirsium terraenigrae	<u>Cirsium engelmannii</u>	S1	
Reflexed trillium	<u>Trillium recurvatum</u>	S2	
Starry campion	<u>Silene stellata</u>	S1-S2	
	<u>Nemastylis geminiflora</u>		
White trout lily	<u>Erythronium albidum</u>	S1	
Wild hyacinth	<u>Camassia scilloides</u>	S1	

3. Social Environment

Data collected relates to those facets of community life and the social fabric of human activities.

Schools

Public, private and church schools are located within the study area. The Caddo Parish School System has a network of elementary, middle, and high schools throughout the study area. The St. Pius School is the only church school; the Trinity Heights Christian Academy is the only private school located in or very close to the study area.

See Exhibit J for location and names of schools.

Parks and Recreational Areas

Caddo Parish has five parks and the City of Shreveport has one designated park within the study area. All but the North Shreveport Metro Park; aka Paul Lynch Park, have been developed; schematic plans have been prepared since 1984, but funding is not available for its development. Depending upon funding sources these parks may have 4 (f) or 6 (f) designation and should be avoided.

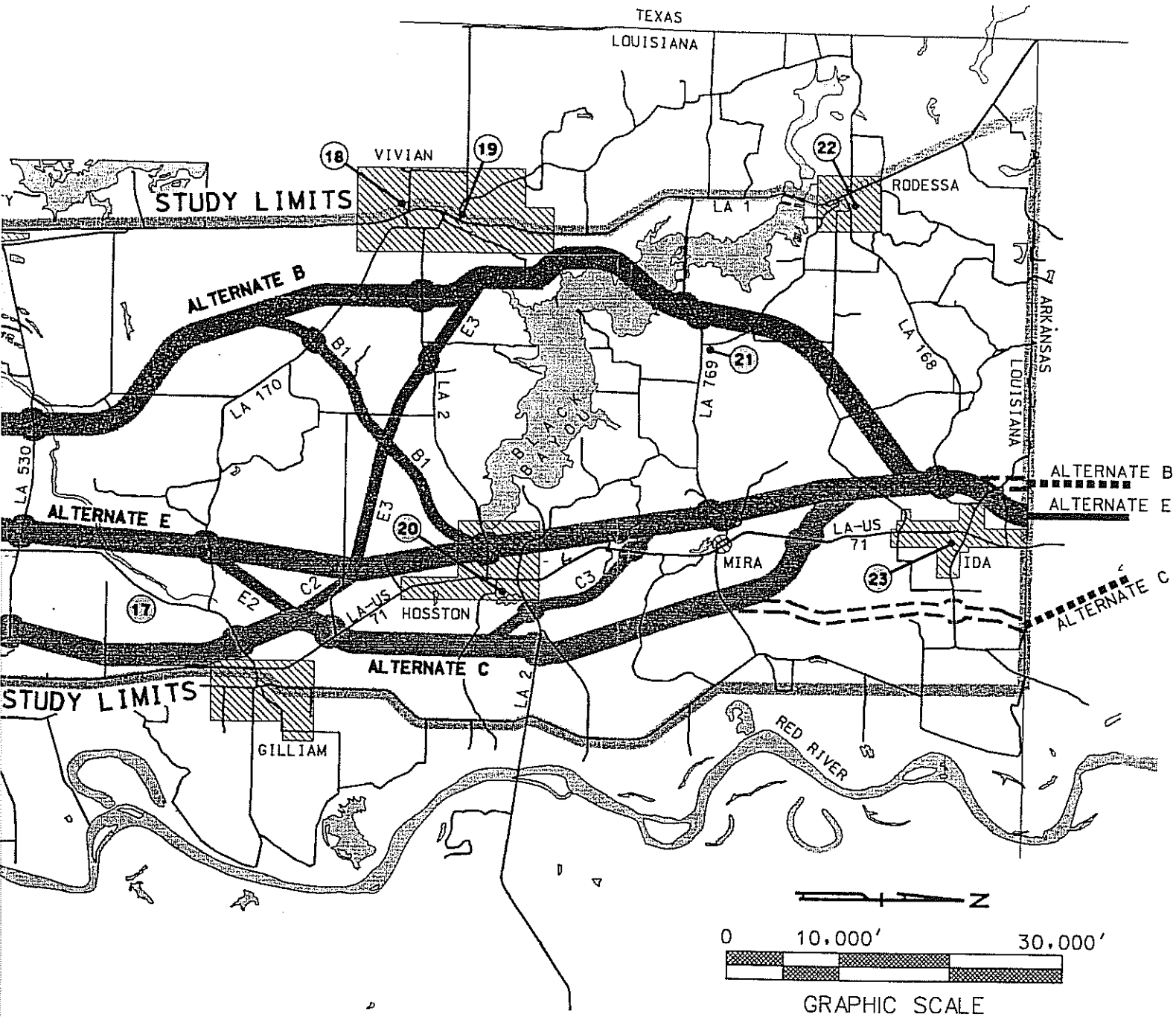
The Robert L. Nance Park located in Hosston may be impacted by Alternative E; careful location of the roadway and use of a "one-sided" interchange on the south side of La 2 may mitigate any impact upon access to this park.

The lands currently designated for the North Shreveport Metro Park is located in the vicinity of the proposed interchange of I-220 and the Expressway. Planned access to the park is limited by way of a roadway or pathway under an existing bridge structure on Martin Luther King Drive. Careful attention to interchange design can either avoid encroachment or have minimum impact upon future development of this park.

See Exhibit K for park locations.

Churches

Churches have been identified though use of quadrangle maps, church directories, and visual observation; See Exhibit L.



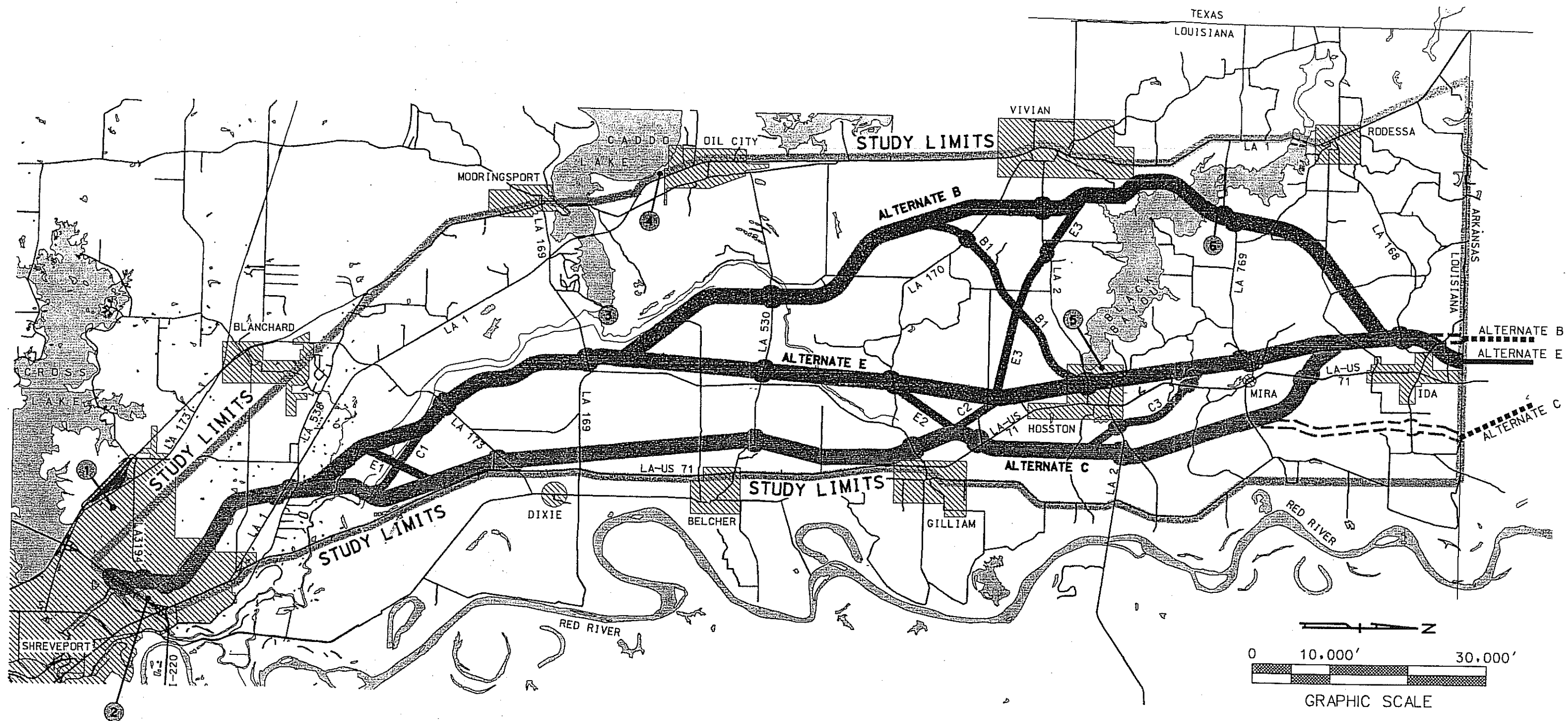
LEGEND

SCHOOL 16

EXHIBIT J
SCHOOLS

NORTH-SOUTH EXPRESSWAY
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CADD0 PARISH

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INDEX TO PARKS

1. DAVID RAINES PARK
2. NORTH SHREVEPORT METRO PARK
(PAUL LYNCH PARK)
3. H. M. DOWNS PARK
4. EARL G. WILLIAMSON PARK
5. ROBERT L. NANCE PARK
6. NOAH TYSON PARK

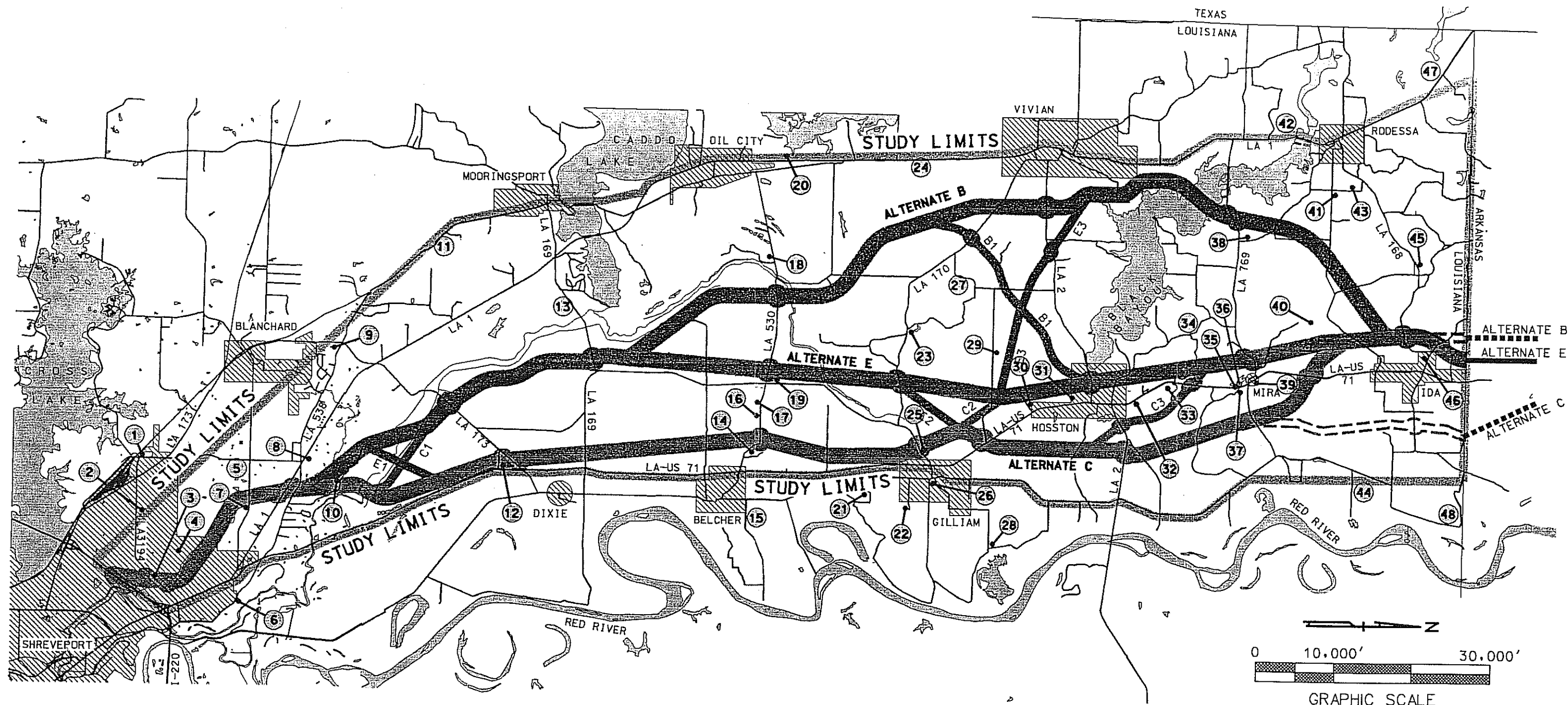
LEGEND

PARK

**EXHIBIT K
PARKS**

NORTH-SOUTH EXPRESSWAY
I-220 TO ARKANSAS STATE LINE
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INDEX TO CHURCHES

- | | | | |
|-----------------------------|----------------------------|---------------------------|-----------------------------|
| 1. PILGRIM REST CH. | 15. EBENEZER CH. | 29. RENO HILL CH. | 43. ANTIOCH CH. |
| 2. LAKE BETHLEHEM CH. | 16. CADDO COMMUNITY CHAPEL | 30. ST. JOHN CH. | 44. BRIGHT MORNING STAR CH. |
| 3. ST. MATTHEW CH. | 17. BRADFORD CHAPEL | 31. FIRST BAPTIST CH. | 45. LINE CREEK CH. |
| 4. ST. LUKE CH. | 18. MT. OLIVE CH. | 32. THOMAS CH. | 46. BETHSAIDA CH. |
| 5. BETHEL CH. | 19. UNION CHAPEL | 33. PARADISE CH. | 47. THREE STATES CH. |
| 6. TRINITY HEIGHTS CH. | 20. CHURCH OF CHRIST | 34. CADDO PRAIRIE CH. | 48. BETHLEHEM CH. |
| 7. FAITH TABERNACLE | 21. JUSTICE CHAPEL | 35. COLQUITT CH. | |
| 8. NORTHWOOD CH. | 22. NEW LIGHT CH. | 36. FIRST PENTECOSTAL CH. | |
| 9. UPPER ZION CH. | 23. PINE ISLAND CH. | 37. ST. MARKS CH. | |
| 10. BRIGHT MORNING STAR CH. | 24. MT. SUPERIOR CH. | 38. ARKADELPHIA CH. | |
| 11. ST. JOHN CH. | 25. NEW AVERY CH. | 39. MIRA BAPTIST CH. | |
| 12. ROSE OF SHARON CH. | 26. GILLIAM CH. | 40. MUNNERLYN CH. | |
| 13. COUNTRY SIDE CH. | 27. MT. GILEAD CH. | 41. ST. MATHEW CH. | |
| 14. ELIZABETH CH. | 28. ST. ELMO CH. | 42. PLEASANT GROVE CH. | |

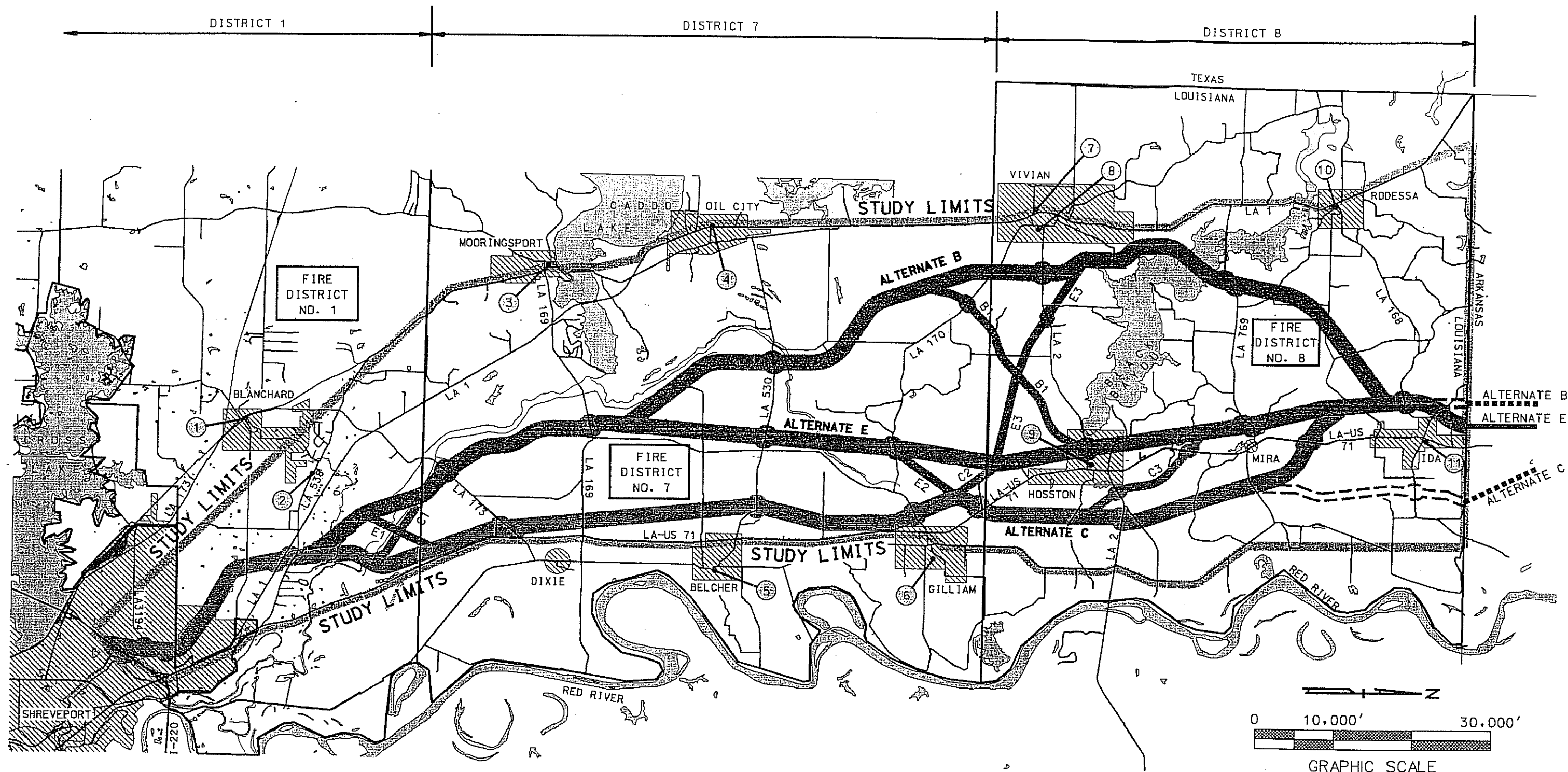
LEGEND

CHURCH ②

EXHIBIT L CHURCHES

NORTH-SOUTH EXPRESSWAY
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INDEX TO FIRE STATIONS

1. DISTRICT 1 FIRE STATION (BLANCHARD)
2. DISTRICT 1 FIRE STATION (BLANCHARD)
3. DISTRICT 7 FIRE STATION (MOORINGSPOINT)
4. DISTRICT 7 FIRE STATION (OIL CITY)
5. DISTRICT 7 FIRE STATION (BELCHER)
6. DISTRICT 7 FIRE STATION (GILLIAM)
7. DISTRICT 8 FIRE STATION (VIVIAN)
8. DISTRICT 8 FIRE STATION (VIVIAN)
9. DISTRICT 8 FIRE STATION (HOSSTON)
10. DISTRICT 8 FIRE STATION (RODESSA)
11. DISTRICT 8 FIRE STATION (IDA)

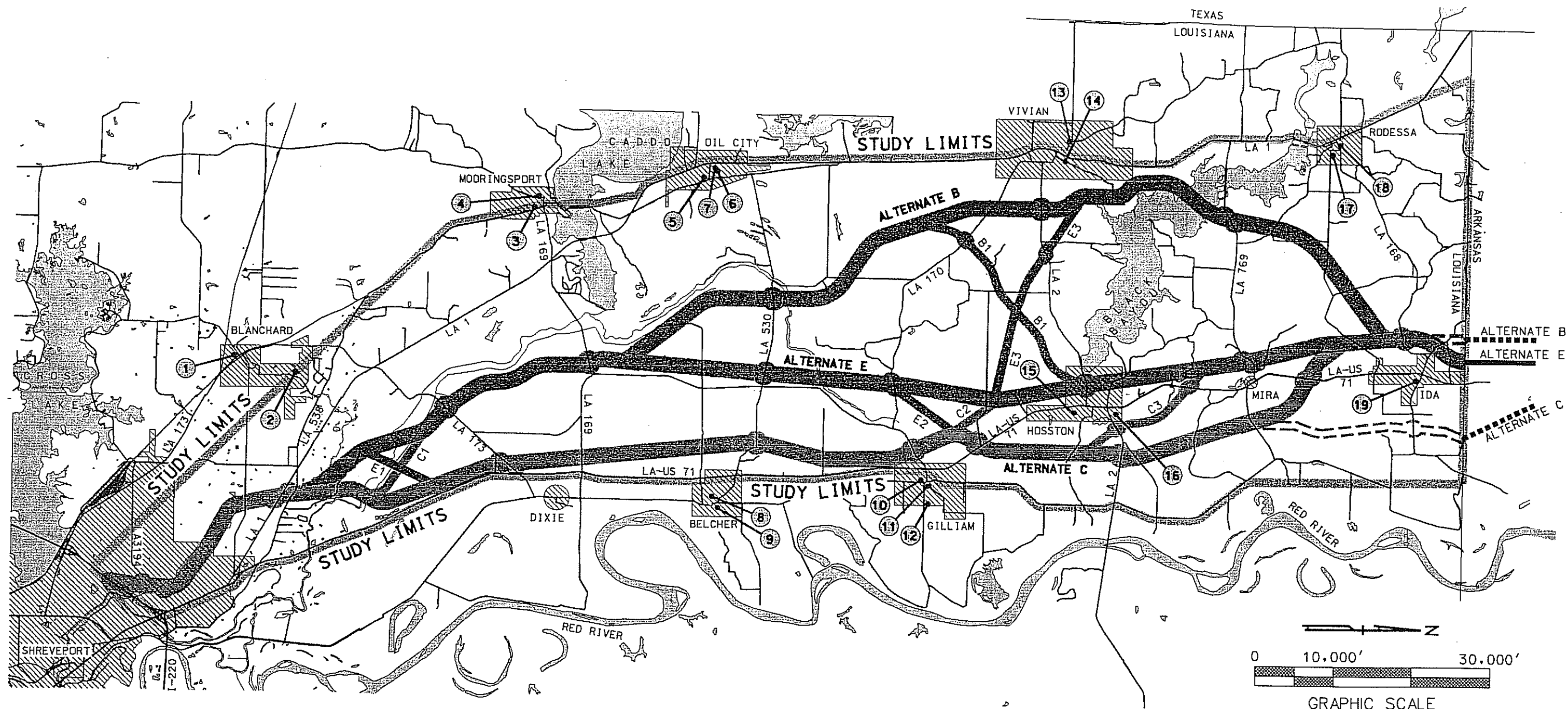
LEGEND

FIRE STATION ②

EXHIBIT O FIRE STATIONS AND DISTRICTS

NORTH-SOUTH EXPRESSWAY
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DEMOPULOS AND FERGUSON, INC.
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INDEX TO PUBLIC BUILDINGS

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|--|--|
| 1. BLANCHARD POST OFFICE | 11. GILLIAM LIBRARY |
| 2. BLANCHARD LIBRARY | 12. BILLIAM TOWN HALL |
| 3. MOORINGSPOST LIBRARY & COMMUNITY CENTER | 13. VIVIAN POST OFFICE |
| 4. MOORINGSPOST POST OFFICE | 14. REDBUD MUSEUM |
| 5. OIL CITY POST OFFICE | 15. HOSSTON POST OFFICE |
| 6. OIL CITY MUSEUM | 16. HOSSTON LIBRARY & COMMUNITY CENTER |
| 7. OIL CITY LIBRARY | 17. RODESSA LIBRARY & COMMUNITY CENTER |
| 8. BELCHER LIBRARY & CITY HALL | 18. RODESSA POST OFFICE |
| 9. BELCHER POST OFFICE | 19. IDA POST OFFICE |
| 10. GILLIAM POST OFFICE | |

LEGEND

PUBLIC BUILDINGS ②

EXHIBIT P PUBLIC BUILDINGS

NORTH-SOUTH EXPRESSWAY
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The economic base of the study area in the past has been primarily tied to farming, timber production, oil and gas production, Barksdale Air Force Base located in Bossier City, and the Louisiana Ordinance Plant located between Shreveport and Minden. Lone Star Ordinance Plant in Karnack, Texas and Red River Ordinance Plant near Texarkana, Texas , also provided employment opportunities for residents in the corridor study area. In the past thirty years the Shreveport-Bossier Metropolitan Statistical Area economic base has become more diversified with location of and addition to existing major facilities of General Motors Assembly Plant; AT&T Manufacturing Plant; General Electric; GNB's Battery Plant, Process Division of UOP Inc., Boots Pharmaceuticals Inc.; Beaird Industries, The Frymaster Corporation, Libbey Glass, Rockwell International, Poulan/Weed Eater and petroleum processing plants. In addition, many other small and medium size manufacturing plants, warehouse and distribution facilities have been established and/or expanded which contribute to the diversity of employment opportunities.

A number of studies have been conducted relating to infrastructure improvements which translate into economic improvement and employment opportunities for the corridor study area. Two studies of significant impact are:

- Master Plan for Marine Terminal Facilities and Industrial Development for Caddo/Bossier Port Commission, April 1976, prepared by Tippets-Abbott-McCartney-Stratton (TAMS), New York, identifies the Tributary Area or the area which would contribute to the use of the proposed port. The tributary area extends north and east of Texarkana to include Miller, Little River, Lafayette, Sevier, Hemstead, and Columbia counties.

These counties would utilize the proposed Expressway north from Shreveport to Texarkana to ship products through the Caddo/Bossier Port to major gulf coast seaports.

- The Kansas City, Missouri to Shreveport, Louisiana Highway Feasibility Corridor Study prepared in response to Section 166 of the Federal-Aid Highway Act of 1987, dated April 1988, notes economic benefits of the highway from Kansas City to Shreveport as follows:

The highway would benefit the entire central states of Iowa, Minnesota, North Dakota, South Dakota, Nebraska along with sections of Canada by providing a continuous North-South route for the movement of grains and manufactured goods to southern market areas and the Gulf of

Mexico ports for international trade shipments and a direct connection to the international port of New Orleans. The highway would support industrial development and economic growth along the highway corridor.

Recent significant events include:

- The Intermodal Surface Transportation Efficiency Act of 1991, ISTEA, is structured to encourage and promote development of a national intermodal transportation system in the United States, to move people and goods in an energy-efficient manner and provide the foundation for improved productivity and growth. The highway between Shreveport and Kansas City and the Caddo/Bossier Port form a significant intermodal transportation system which is encouraged by ISTEA.
- The NAFTA is designed to open trade barriers between Canada, United States of America and Mexico. Increased trade will require improved highway access to all markets. The proposed highway between Arkansas and Shreveport is the last major link between Canada and the Gulf of Mexico area ports. The Caddo/Bossier Port and the construction of the North-South Expressway as a part of Corridor One, which ties in Shreveport to Kansas City, not only enhances international trade opportunities, but also creates an intermodal system encouraging interaction between multiple transportation systems.
- Dedication of Lock and Dam No. 5 on Red River in February ,1995, formally opened barge navigation from Gulf of Mexico ports to the Shreveport-Bossier area. The Caddo-Bossier Port has been active with an intensive marketing and construction program the past few years preparing for barge navigation. Recent announcements of location of major industries at the Port is indicative of the Port's ability to serve as a contributor to the economic base of the SMSA.

Additional area economic information and data is available from:

U.S. Department of Commerce, 1990 Census of Housing and Population
Shreveport Chamber of Commerce
Bossier Chamber of Commerce
Northwest Louisiana Council of Governments

Northwest Louisiana Development Center
LSU/S in Shreveport, Louisiana
Louisiana Tech in Ruston, Louisiana
Centenary College in Shreveport, Louisiana